AMENDMENTS TO THE CLAIMS

1. (currently amended) A data transmission system having a first station for dividing data into one or more sections and thereafter adding a sequential transmission number thereto to create a frame or frames to transmit ~~the same~~, and a second station for receiving the frame or frames,

the second station comprising a detection ~~means~~ unit for detecting error frames among the frame or frames, which cannot be ~~means~~ received normally, a judgment ~~means~~ unit for judging whether the number of error frames being consecutive is equal to or more than a threshold, a threshold setting ~~means~~ unit for setting the threshold on the basis of a status of transmission associated with the first station and the second station, and a retransmission demanding unit for transmitting to the first station a re-transmission demand frame, which demands retransmission of all frames numbered subsequent to a specified transmission number, in the case where the number of the error frames being consecutive is equal to or more than the threshold, and for transmitting to the first station a re-transmission demand frame, which demands re-transmission of a frame having a specified transmission number, in the case where the number of the error frames being consecutive is less than the threshold.

2. (currently amended) The data transmission system according to claim 1, wherein the threshold setting ~~means~~ unit sets a threshold on the basis of the number, in which error frames generated in the past are consecutive.

3. (original) The data transmission system according to claim 1, wherein the threshold is an average of the number, in which error frames generated in the past are consecutive.

4. (currently amended) The data transmission system according to claim 1, wherein the threshold setting ~~means~~ unit sets a threshold in accordance with a rate of errors, which are generated in the past without consecution.

5. (currently amended) A data transmission system having a first station for receiving a frame or frames and for dividing data into one or more sections and thereafter adding sequential transmission number thereto to create a frame or frames to transmit ~~the same~~, and a second station for receiving the frame or frames, and for dividing data into one or more sections and thereafter adding sequential transmission number to create a frame or frames to transmit ~~the same~~,

the second station comprising a detection ~~means~~ unit for detecting error frames among the frame or frames, which are

transmitted from the first station and cannot be received normally, a judgment ~~means~~ unit for judging whether the number of error frames being consecutive is equal to or more than a threshold, a threshold setting ~~means~~ unit for setting the threshold on the basis of a status of transmission associated with the first station and the second station, and a re-transmission demanding ~~means~~ unit for transmitting to the first station a re-transmission demand frame, which demands re-transmission of all frames numbered subsequent to a specified transmission number, in the case where the number of the error frames being consecutive is equal to or more than the threshold, and for transmitting to the first station a re-transmission demand frame, which demands re-transmission of a frame having a specified transmission number, in the case where the number of the error frames being consecutive is less than the threshold.

6. (currently amended) The data transmission system according to claim 5, wherein the first station comprises a first transmission ~~means~~ unit for transmitting a transmission-status frame indicative of a status of generation of error frames, which cannot be normally received, among a frame or frames transmitted from the second station, and the threshold setting ~~means~~ unit sets a threshold in accordance with the transmission-status frame.

7. (currently amended) The data transmission system according to claim 6, wherein the first transmission ~~means~~ unit transmits a transmission-status frame indicative of failure in the case where the frequency, at which error frames generate, is equal to or more than a specified value as predetermined, and a transmission-status frame indicative of favorableness in the case where the frequency, at which error frames generate, is less than the specified value, and wherein the threshold setting ~~means~~ unit sets the threshold to be large in the case of receiving a transmission-status frame indicative of favorableness as compared with the case of receiving a transmission-status frame indicative of failure.

8. (currently amended) The data transmission system according to claim 5, wherein the second station comprises a transmission buffer for temporarily storing frames as divided, and comprises a second transmission ~~means~~ unit for transmitting a frame or frames stored in the transmission buffer, and wherein the threshold setting ~~means~~ unit sets a threshold in accordance with the number of frames stored in the buffer.

9. (currently amended) The data transmission system according to claim 5, wherein the second station comprises a detection ~~means~~ unit for detecting a round trip delay being a time elapsed until a frame of the transmission number specified is received after

transmission of a re-transmission demand frame, of which the transmission number is specified, and wherein the threshold setting ~~means~~ unit sets a threshold in accordance with the round trip delay.

10. (currently amended) A data transmission system having a first station for dividing data into one or more sections and thereafter adding sequential transmission number thereto to create a frame or frames to transmit ~~the same~~, and a second station for receiving the frame or frames,

the second station comprising a detection ~~means~~ unit for detecting error frames among the frame or frames, which cannot be received normally, a judgment ~~means~~ unit for judging from a status of generation of the error frames whether a single frame error is dominant or successive frame errors are dominant, a threshold setting ~~means~~ unit for setting a threshold on the basis of the judgment, and a re-transmission demanding ~~means~~ unit for transmitting to the first station a re-transmission demand frame, which demands re-transmission of all frames numbered subsequent to a specified transmission number, in the case where the number of the error frames being consecutive is equal to or more than the threshold, and for transmitting to the first station a re-transmission demand frame, which demands retransmission of a frame having a specified transmission number, in the case where the

number of the error frames being consecutive is less than the threshold.

11. (new) A receiving station for receiving a frame or frames having a sequential transmission number and being transmitted from a transmission station comprising:

a detection unit for detecting error frames among the frame or frames, which cannot be received normally;

a judgment unit for judging whether the number of error frames being consecutive is equal to or more than a threshold;

a threshold setting unit for setting the threshold on the basis of a status of transmission associated with the transmission station and the receiving station, and

a re-transmission demanding unit for transmitting to the transmission station a re-transmission demand frame, which demands re-transmission of all frames numbered subsequent to a specified transmission number, in the case where the number of the error frames being consecutive is equal to or more than the threshold, and for transmitting to the transmission station a re-transmission demand frame, which demands re-transmission of a frame having a specified transmission number, in the case where the number of the error frames being consecutive is less than the threshold.